

CHECKLIST FOR OPTIMAL PHARMACEUTICAL VALIDATION IN VERY LOW-BIRTH-WEIGHT PRETERM NEWBORNS IN THE NEONATAL INTENSIVE CARE UNIT

I. Sacanella Anglès, M. Martín Marqués, P. López Broseta, J. Bodega Azuara, D. Pascual Carbonell, H. Suñer Barriga, A. Sanjuan Belda, CD. Ciuciu, S. Conde Giner, E. Esteve Pitarch, A. García Molina, S. Jornet Montaña, I. Plo Seco, MA. Roch Ventura, M. Vuelta Arce, L. Canadell Vilarrasa

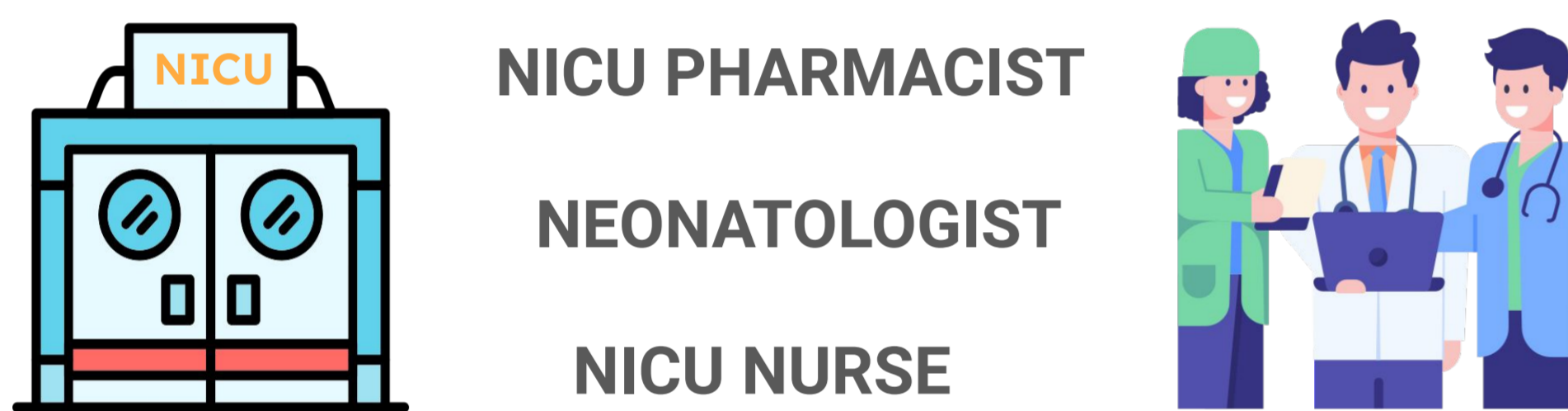
Pharmacy Department, Hospital Universitari Joan XXIII. Tarragona, Spain

What was done?

To develop a checklist that facilitates pharmacotherapy validation for preterm newborns (PTNB) weighing less than 1000 g and hospitalized in the neonatal intensive care unit (NICU). The primary objective is to **ensure a higher quality of hospital care** in terms of pharmacotherapy.

Why was it done?

The neonatal intensive care unit (NICU) is a **complex area of pediatric hospitalization that necessitates specialized healthcare professionals**. The role of the NICU pharmacist is vital in ensuring the appropriate and optimized use of medications in various critical situations.



NICU PHARMACIST
NEONATOLOGIST
NICU NURSE

What has been achieved?



Pulmonary surfactant	Iron	Dexamethasone	Nystatin	Vitamin D ₃
Ampicillin	Caffeine citrate	Gentamicin	Ibuprofen	Fluconazole

Dose adjustments in RENAL or HEPATIC DYSFUNCTION

DAYS

0-1

Administer pulmonary surfactant and caffeine citrate. For antibiotic prophylaxis, use ampicillin and gentamicin, and fluconazole for antifungal prevention. In cases of an open ductus arteriosus, intravenous ibuprofen should be added.

10-15

Administer vitamin D₃ and a multivitamin complex if the neonate tolerates oral administration. If there is a risk of bronchopulmonary dysplasia, which is characterized by more than 7 days of intubation and difficulty with extubation, consider adding dexamethasone and nystatin.

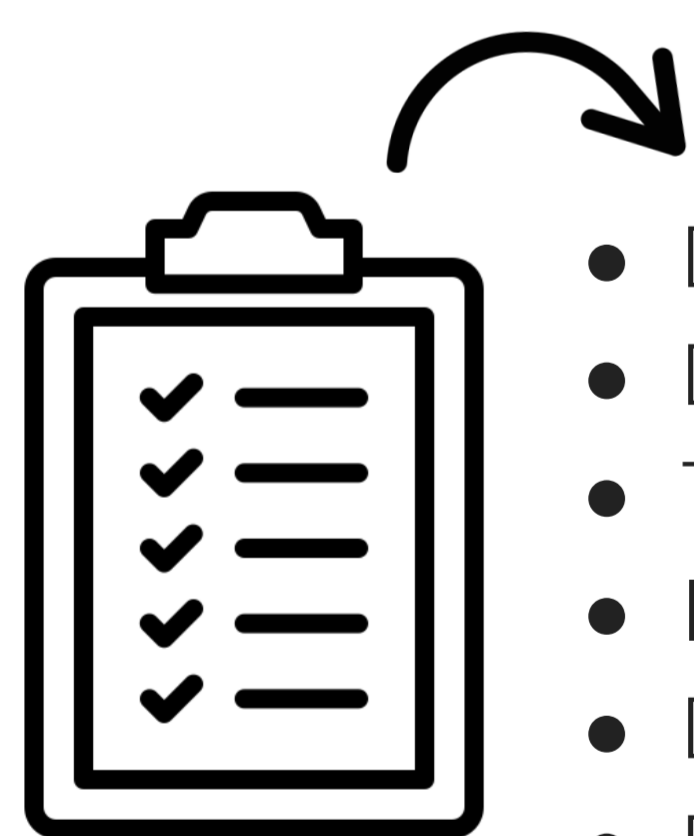
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Monitor ferritin and vitamin D₃ levels. Begin oral iron supplementation (ferrum) 30 days after birth. Both drugs should be continued for one year.

In cases where meningitis is suspected, we have provided recommendations for increasing the dose to ensure adequate penetration into the central nervous system.

How was it done?

We conducted a literature review to identify the **pharmacotherapy requirements for preterm newborns (PTNB) weighing less than 1000 g** during their first 30 days of life.

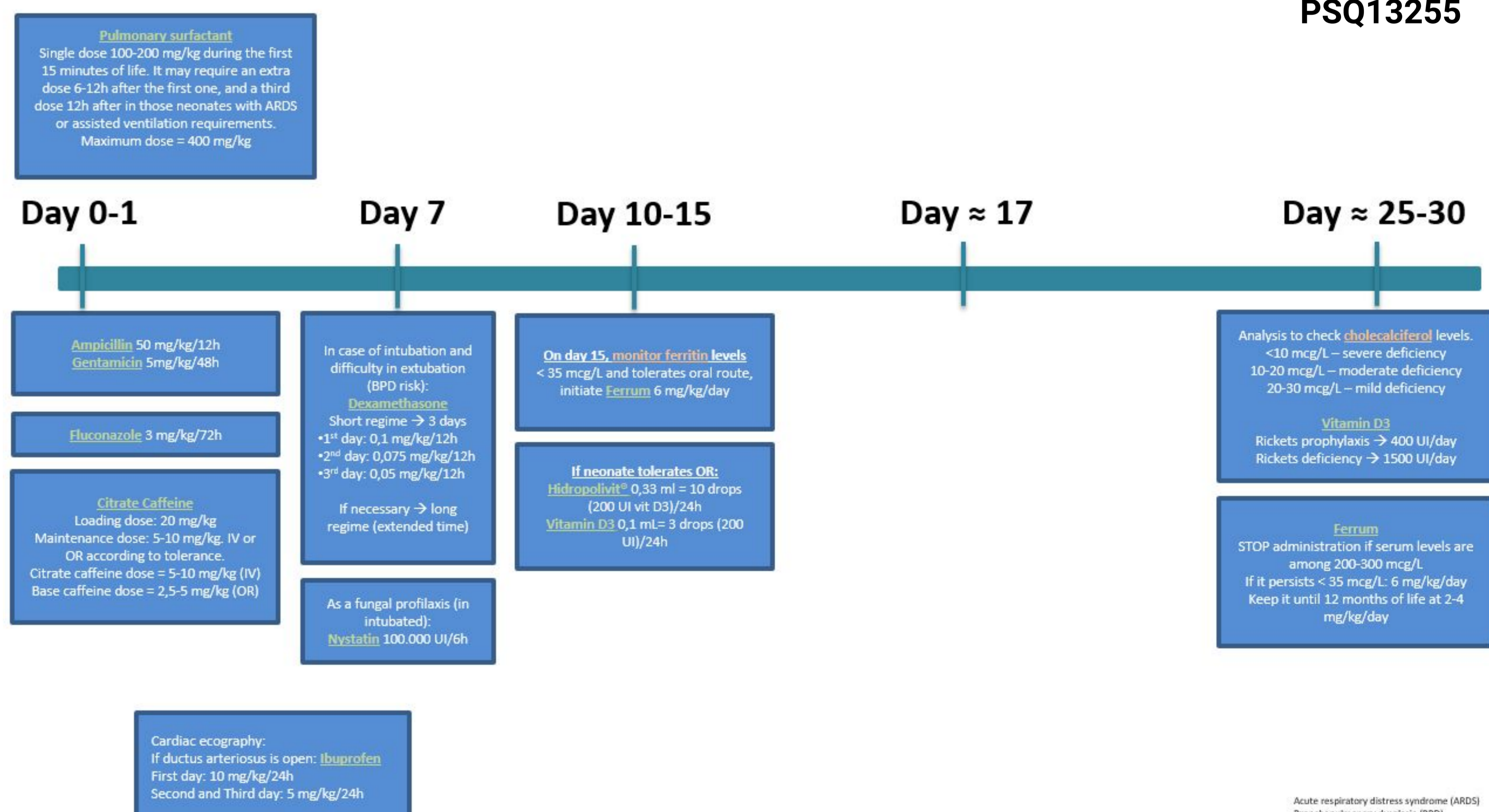


- Drugs
- Dosages
- Treatment duration
- Initiation date
- Drug monitoring (when necessary)
- Recommendations (specific clinical scenarios)

Checklist for preterm newborns < 1000 g (NICU)



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What next?

This tool **simplifies pharmaceutical validation**, particularly for pharmacists who may not specialize in the care of these complex patients.

- ↑ Patient safety
- ↑ Pharmacotherapy validation
- ↓ Drug-related errors
- ↓ Protocol heterogeneity